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ATRIAL FIBRILLATION RESULTS IN HIGHER MORTALITY IN PATIENTS WITH PULMONARY HYPERTENSION

Poster Contributions
Hall C
Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Arrhythmias and Clinical EP: Advances in Stroke Risk Stratification for Patients with Atrial Fibrillation
Abstract Category: 4. Arrhythmias and Clinical EP: AF/SVT
Presentation Number: 1143-123

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Background: Established prognostic factors for pulmonary hypertension (PH) include brain natriuretic peptide and hemodynamic measures such as central venous pressure and cardiac output. The prognostic role of atrial fibrillation (AF) is yet to be determined in patients with PH. The aim of this study was to evaluate the effect of AF on outcomes in severe PH.

Methods: From 2002 to 2012, transthoracic echocardiograms of all individuals were reviewed to find patients with severe PH defined by a pulmonary artery systolic pressure > 60 mmHg. All patients with an ejection fraction < 50% were excluded. Patients were divided into 2 groups:
A) Severe PH without AF (based on history and ECG criteria)
B) Severe PH with AF (based on history and ECG criteria)
Inpatient and social security death records were used to determine one-year mortality. Hospital records were used to determine one-year readmission rate for acute PH or cor pulmonale.

Results: A total of 2755 patients (1679 in Group A and 1076 in Group B) were included (mean age 71; 30% male). After one year, mortality rates of PH patients with and without AF were 33.4% and 24.8% respectively (p<0.001; RR 1.4, 95% CI 1.2-1.6). One-year readmission rates of PH patients with and without AF were 4.1% and 2.5% respectively (p=0.03; RR 1.8, 95% CI 1.2-2.8).

Conclusion: Patients who have severe PH with AF have higher mortality and readmission rates compared to patients with severe PH who do not have AF. These findings may support the use of AF as a marker of poor prognosis in patients with severe PH.